CORRELATION OF ULTRASTRUCTURE AND BIOCHEMISTRY IN THE CHARACTERISATION OF *Sarcocystis* SPP.

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Seven species of *Sarcocystis*, which had been separated using the traditional criteria of morphology and host specificity, were further studied ultrastructurally and biochemically to confirm their classification. The ultrastructural study concentrated on the protrusions on the surface of the primary cyst wall and the biochemical study measured the difference in mobility of 15 isoenzymes by electrophoresis on cellulose acetate gels.

Ultrastructurally there were seven distinctly different morphological forms of protrusions on the outer cyst wall and electrophoretic results gave differences in enzyme mobilities between species ranging from 20% to 87%.

The results of the two techniques correlated well with each other and with the primary classification, which had first been used to separate the various cyst populations thus confirming the validity of the latter for these *Sarcocystis* spp. The combination of modern technologies, biochemistry, molecular biology and electron microscopy, are proving to be useful adjuncts to traditional taxonomic methods. Such a multi-disciplinary approach has now been set up in R.H.A.'s laboratory to permit this approach to be applied to a wide range of parasites.

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